



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

January 14, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Truck Accessories Group / MSM 039-18052-00076

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-MOD.dot 9/16/03

January 14, 2004

Mr. Michael Stephenson
Truck Accessories Group, dba 20th Century Fiberglass
1131 D.I. Drive
Elkhart, Indiana 46514

Re: 039-18052
Minor Source Modification to:
Part 70 permit No.: T039-7437-00076

Dear Mr. Stephenson

Truck Accessories Group, dba 20th Century Fiberglass was issued Part 70 operating permit T039-7437-00076 on January 15, 1999 for a stationary fiberglass component manufacturing operation. An application to modify the source was received on October 3, 2003. Pursuant to 326 IAC 2-7-10.5 the modification to the existing aluminum truck cap to increase production is approved for construction at the source:

- (a) Aluminum truck cap customized painting operation with a maximum capacity of 1.25 units per hour. This emission unit is equipped with High Volume Low Pressure (HVLP) spray system, with dry filters to control PM overspray emissions.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the source modification has been issued. The source must comply with the requirements of 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
APD

cc: File - Elkhart County
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector- Tony Pelath
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Truck Accessories Group, bda 20th Century Fiberglass
1131 D.I. Drive
Elkhart, Indiana 46514**

(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the emission units described in Section D of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 039-18052-00076	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: January 14, 2004

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (A) Aluminum truck cap customized painting operation with a maximum capacity of 1.25 units per hour. This emission unit is equipped with High Volume Low Pressure (HVLP) spray system, with dry filters to control PM overspray emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds [326 IAC 8-2-9]

The aluminum truck cap customized painting operation is capable of painting 30 truck caps per day. Therefore, 326 IAC 8-2-9 (Miscellaneous Metal Coating) is not applicable. Any change or modification to this operation which may increase the truck caps being painted to 35 units per day, shall be subject to 326 IAC 8-2-9, and must be approved by the Office of Air Quality before such change may occur.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the aluminum truck cap customized painting shall be controlled by a dry particulate filter, waterwash, or an equivalent control subject to the following:

- (a) The source shall operate the control device in accordance with manufacturer's specification.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.3 Record Keeping Requirements

- (a) To document compliance with D.1.1, the Permittee shall maintain a log of the customized aluminum truck caps produced daily.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the Part 70 Permit.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification and Minor Permit Modification

Source Background and Description

Source Name:	Truck Accessories Group, dba 20 th Century Fiberglass
Source Location:	1131 D.I. Drive, Elkhart, Indiana 46514
County:	Elkhart
SIC Code:	3089, 3792
Operation Permit No.:	T039-7437-00076
Operation Permit Issuance Date:	January 15, 1999
Minor Source Modification No.:	039-18052
Minor Permit Modification No.:	039-18245
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed a modification application from Truck Accessories Group, dba 20th Century Fiberglass relating to the following:

- (a) Re-classification of the aluminum truck cap customized painting operation, an insignificant activity into a permitted emission unit with a maximum capacity of 1.25 units per hour. This emission unit is equipped with High Volume Low Pressure (HVLP) spray system, with dry filters to control PM overspray emissions.

History

On October 3, 2003, Truck Accessories Group dba 20th Century Fiberglass submitted an application to the OAQ requesting to increase production to their existing insignificant emission unit. Truck Accessories Group dba 20th Century Fiberglass was issued a Part 70 permit T039-7437-00076 on January 15, 1999.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 3, 2003. Additional information was received on October 17, 2003.

Emission Calculations

- (a) Aluminum Truck Caps Painting: See Pages 1 and 2 TSD Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	3.16
PM-10	3.16
SO ₂	0.00
VOC	18.09
CO	0.00
NO _x	0.00

HAP's	Potential To Emit (tons/year)
Xylene	3.64
Toluene	0.10
MIBK	0.31
Ethyl Benzene	0.54
MEK	1.39
Worst Case Single HAP	3.64
Combined HAPs	5.98

Justification for Modification

- (a) The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification, pursuant to 326 IAC 2-7-10.5(d), since the volatile organic compound (VOC) potential to emit is greater than 10 tons per year but less than 25 tons per year.
- (b) The Part 70 Operating permit is being modified through a Part 70 Minor Permit Modification, pursuant to 326 IAC 2-7-12(b), since the change does not qualify as significant change to the existing monitoring, reporting and record keeping requirements in the Part 70 permit, and does not qualify as an Administrative Amendment.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Elkhart County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD or Emission Offset Definition (taken from the issued Part 70 permit 039-7437-00076, since no modification from the source has been made since the Part 70 has been issued):

Pollutant	Emissions (tons/year)
PM	1.79
PM-10	1.79
SO ₂	0.0
VOC	177.0
CO	0.0
NO _x	0.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs

Modification of the Aluminum Truck Cap Painting	3.64	3.64	0.00	18.09	0.00	0.00	5.98
PSD Threshold	250	250	250	250	250	250	-
Existing Source PTE	1.79	1.79	0.00	177.00	0.00	0.00	0.00
Source PTE After Modification	5.43	5.43	0.00	195.09	0.00	0.00	0.00

- (a) This modification to an existing minor stationary source is **not** major because the emission increase is less than the PSD threshold. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

- (a) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

- (a) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The aluminum truck cap painting involves customized topcoating of trucks, however, it is exempted from this rule, as the production is less than thirty-five (35) vehicles per day (1.25 vehicle/hr * 24 hrs/day = 30 vehicles/day).
- (b) 326 IAC 8-1-6 (General Reduction Requirements)
The aluminum truck cap painting is not subject to 326 IAC 8-1-6, as the volatile organic compounds (VOC) potential emission of 18.09 tons per year is less than 25 tons per year.
- (c) 326 IAC 6-3-2 (Process Operations)
Pursuant to 326 IAC 6-3-2(d), the aluminum truck cap painting shall be controlled by a dry particulate filter, waterwash, or an equivalent control subject to the following:
- (1) The source shall operate the control device in accordance with manufacturer's

specification.

Since the source is operating under a Part 70 permit, the source is exempt from complying with 326 IAC(d)(2).

Changes to the Part 70 Permit

The Part 70 permit will be modified to incorporate the changes permitted in Minor Source Modification 039-18052 (changes will be **bolded** and deletions are ~~struck-through~~ for emphasis):

- (a) Section A.3 Insignificant Activities will be modified to delete the aluminum truck cap painting in this section as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (2) Tonneau cover adhesive application, identified as Adhesive Booth T with a maximum usage of 0.20 gallon per hour, using air-assisted airless spray system.
- (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment .
- (4) Paved and unpaved roads and parking lots with public access.
- (5) Other activities of categories not previously identified:

Insignificant Thresholds: Activities with emissions equal to or less than thresholds require listing only

Lead (Pb) = 0.6ton/year or 3.29 lbs/day	Carbon Monoxide (CO) = 25 lbs/day
Sulfur Dioxide (SO ₂) = 5 lbs/hour or 25 lbs/day	Particulate Matter (PM) = 5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NO _x) = 5 lbs/hour or 25 lbs/day	Volatile Organic Compounds = 3 lbs/hour or 15 lbs/day

- (a) One (1) combination booth (sanding operations, saw dust collectors)
- (b) Touch up painting
- (c) Waxing of molds
- (d) Twelve (12) hand grinders
- (e) Six (6) water cutters
- (f) Two (2) 6,000 capacity unsaturated polyester resin storage tanks
- (g) Two (2) 300 gallon capacity shear mixing tanks used to mix unsaturated polyester resin and calcium carbonate
- (h) One (1) 1,500 gallon capacity acetone storage tank
- (i) One (1) adhesive application spray area with two (2) stations to apply adhesive to tonneau covers
- (j) One (1) corrugating station used to hand cut cardboard and fiberglass mat for hand and spray lay-up operations and the bandsaw cutting of aluminum
- (k) One (1) gelcoat storage and mixing room
- (l) Less than 90 day storage of hazardous wastes containing VOC's and HAPs in closed containers
- (m) Metal strip cutting operation

- (n) Mold repair and maintenance operations
- ~~(o) Aluminum truck cap painting~~

(6) through (14) no changes

- (b) Section A.2 Emission Units and Pollution Control Equipment Summary will be modified to include the aluminum truck cap painting and be numbered (8) as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(1) through (7) no changes

- (8) Aluminum truck cap customized painting operation with a maximum capacity of 1.25 units per hour. This emission unit is equipped with High Volume Low Pressure (HVLP) spray system, with dry filters to control PM overspray emissions.**

- (c) Section D.1 will be modified to incorporate the redesignation of the aluminum truck cap

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(1) through (7) no changes

- (8) Aluminum truck cap customized painting operation with a maximum capacity of 1.25 units per hour. This emission unit is equipped with High Volume Low Pressure (HVLP) spray system, with dry filters to control PM overspray emissions.**

INSIGNIFICANT ACTIVITIES:

- (2) Tonneau cover adhesive application, identified as Adhesive Booth T with a maximum usage of 0.20 gallon per hour, using air-assisted airless spray system.

- (5) (a) One (1) combination booth (sanding operations and saw dust collectors)

D.1.2 Volatile Organic Compounds (VOC) Emissions

(a) through (f) no changes

- (d) Condition D.1.3 will be added as follows. Subsequent conditions will be re-numbered accordingly:

D.1.3 Volatile Organic Compounds [326 IAC 8-2-9]

The aluminum truck cap customized painting operation is capable of painting 30 truck caps per day. Therefore, 326 IAC 8-2-9 (Miscellaneous Metal Coating) is not applicable. Any change or modification to this operation which may increase the truck caps being painted to 35 units per day, shall be subject to 326 IAC 8-2-9, and must be approved by the Office of Air Quality before such change may occur.

- (e) Existing Condition D.1.3, Particulate Matter will be modified to include the condition for the aluminum truck cap painting and be re-numbered D.1.4:

D.1.3 4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) The PM from Spray Booth #1, Spray Booth #2, Paint/Clear #3, and Paint/Clear #4, Main Glass Plant Chop Booth, Main Glass Plant Gel Coat Booth, Research and Development Chop Booth, Research and Development Gel Coat Booth shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (b) **Pursuant to 326 IAC 6-3-2(d), the aluminum truck cap painting shall be controlled by a dry particulate filter, waterwash, or an equivalent control subject to the following:**

- (1) **The source shall operate the control device in accordance with manufacturer's specification.**

- (f) The Record Keeping Requirements will be modified to include record keeping requirements for the aluminum truck cap customized painting.

D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.8 and D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) **To document compliance with Condition D.1.3, the Permittee shall maintain log of the customized aluminum truck caps produced daily.**
- (e)(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for

enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached **Part 70 Minor Source Modification No. 039-18052-00076, and Minor Permit Modification 039-18245-00076.**

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Truck Accesories Grp., dba 20th Century Fiberglass
Address City IN Zip: 1131 D.I. Drive, Elkhart, IN 46514
MSM : 039-18052
Plt ID: 039-00076
Reviewer: Aida De Guzman
Date Application Received: October 3, 2003

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Mixed Paint	7.3	82.75%	0.5%	82.3%	0.5%	12.81%	0.37500	1.250	6.07	6.04	2.83	67.92	12.40	0.65	47.13	75%
Mixed Clear	9.3	47.13%	24.4%	22.7%	0.0%	52.06%	0.25000	1.250	2.10	2.10	0.66	15.75	2.87	1.67	4.03	75%
Cleaner	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.03750	1.250	6.76	6.76	0.32	7.61	1.39	0.00	ERR	75%

State Potential Emissions

Add worst case coating to all solvents

3.80

91.27

16.66

2.32

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Page 2 of 2 TSD App A

Company Name: Truck Accesories Grp., dba 20th Century Fiberglass
Address City IN Zip: 1131 D.I. Drive, Elkhart, IN 46514
MSM: 039-18052
Plt ID: 039-00076
Permit Reviewer: Aida De Guzman
Date: October 3, 2003

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MIBK	Weight % Ethyl Benzene	Weight % MEK	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	MEK Emissions (ton/yr)
Mixed Paint	7.3	0.375000	1.25	24.18%	0.68%	2.04%	3.60%	0.00%	3.64	0.10	0.31	0.54	0.00
Mixed Clear	9.3	0.250000	1.25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Cleaner	6.8	0.037500	1.25	0.00%	0.00%	0.00%	0.00%	100.00%	0.00	0.00	0.00	0.00	1.39

Total State Potential Emissions

Worst Case Single HAP
Combined HAPs

3.64	0.10	0.31	0.54	1.39
3.64				
5.98				

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs